

CLAIMS

1. Method for correcting speed feedback in a synchronous permanent-magnet motor, **characterized** in that the averages of speed reference and speed measurement for both downward and upward constant-speed travel are calculated, whereupon the gain and zero factors are identified and the measured speed measurement value is corrected to the correct value.
2. Method according to claim 1, **characterized** in that the above-mentioned averages of speeds are calculated using the sum of the speeds and the number of samples.
3. Method according to claim 2, **characterized** in that a new speed gain factor and speed zero factor are calculated.
4. Method according to claim 3, **characterized** in that the aforesaid speed gain factors and speed zero factors are updated by a forgetting factor.
5. Method according to claim 3, **characterized** in that the aforesaid speed gain factors and speed zero factors are updated by an exponential forgetting factor.
6. Method according to claim 4 or 5, **characterized** in that, by applying the aforesaid forgetting factor, measurement samples of recent history are given more weight as compared with later measurement samples.
7. Method according to any one of the preceding claims, **characterized** in that the method is adaptive.
8. Method according to any one of the preceding claims, **characterized** in that the synchronous permanent-magnet motor of the method is used as an elevator drive machine.